

WHAT IS CLAIMED IS:

1. A process of solvent extraction of copper which treats an aqueous chloride solution containing copper and one or more concomitant elements to separate/recover copper, comprising:

the first step for selective extraction of copper from the aqueous chloride solution by mixing the solution with an extractant of organic solvent composed of tributyl phosphate as the major component after adjusting the solution at an oxidation-reduction potential of 0 to 350mV (based on an Ag/AgCl electrode), and

the second step for stripping of copper by mixing the extractant in which copper is stripped with an aqueous solution.

2. The process solvent extraction of copper according to Claim 1, wherein the aqueous chloride solution for the first step is kept at an oxidation-reduction potential of 250 to 300mV (based on an Ag/AgCl electrode).

3. The process solvent extraction of copper according to Claim 1, wherein the extractant for the first step contains tributyl phosphate at 40% by volume or more.

4. The process solvent extraction of copper according to Claim 3, wherein the extractant for the first step contains tributyl phosphate at 80 to 90% by volume.

5. The process solvent extraction of copper according to Claim 1, wherein the aqueous solution for the second step contains copper at 70g/L or less and the chlorine ion at 50 to 350g/L.

6. The process solvent extraction of copper according to Claim 1, wherein the stripping is carried out at 20 to 90°C in the second step.
7. The process solvent extraction of copper according to one of Claims 1 to 6, wherein the concomitant elements are iron and/or silver.